

FIG. 1

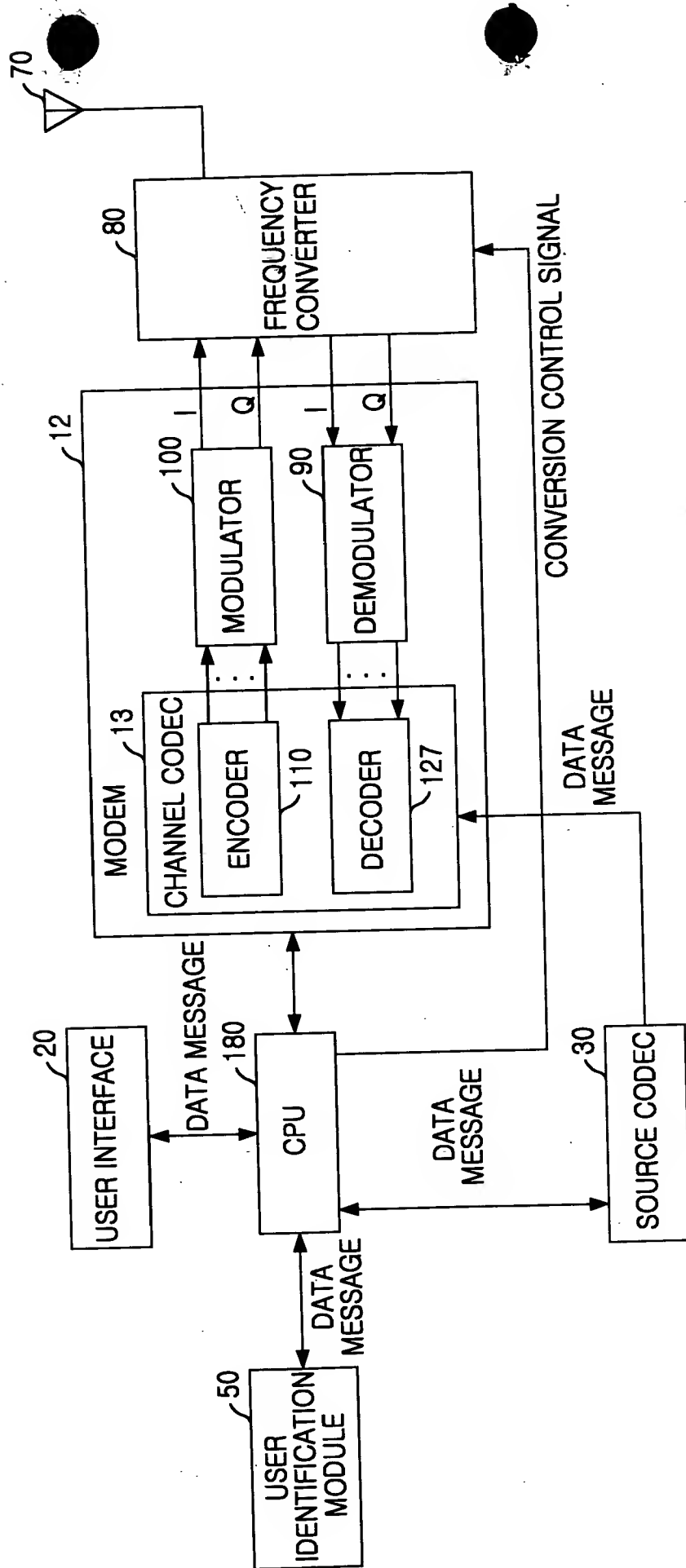


FIG. 2 shows a tree diagram of the 16-point Hadamard transform. The tree starts with a single input at the bottom, which branches into two groups of eight points each. Each group of eight points further branches into two groups of four points each, and so on, until the final output of 16 points is reached. The diagram illustrates the hierarchical structure of the transform, showing how the input is processed through multiple stages of butterfly operations.

FIG. 2

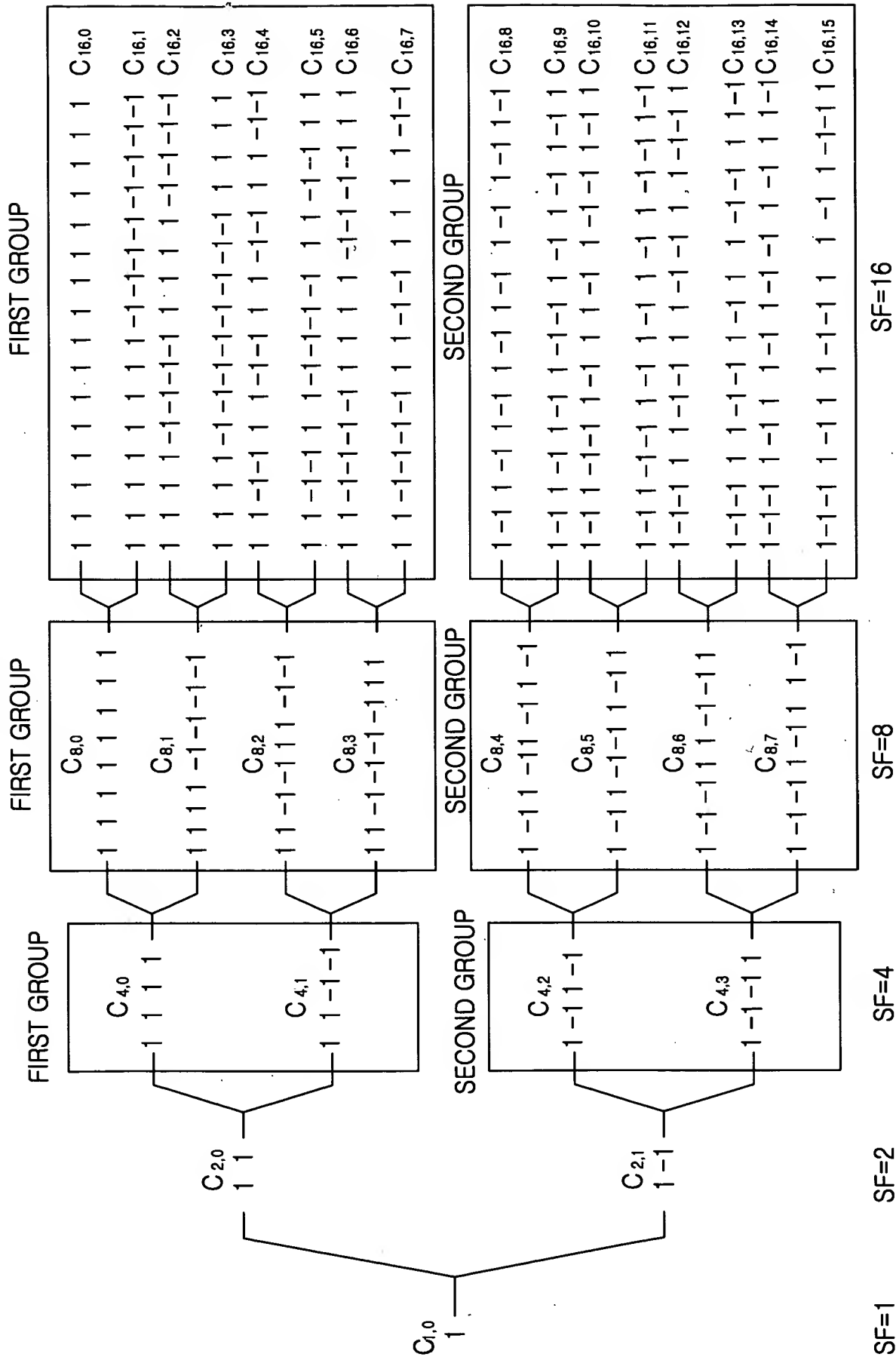
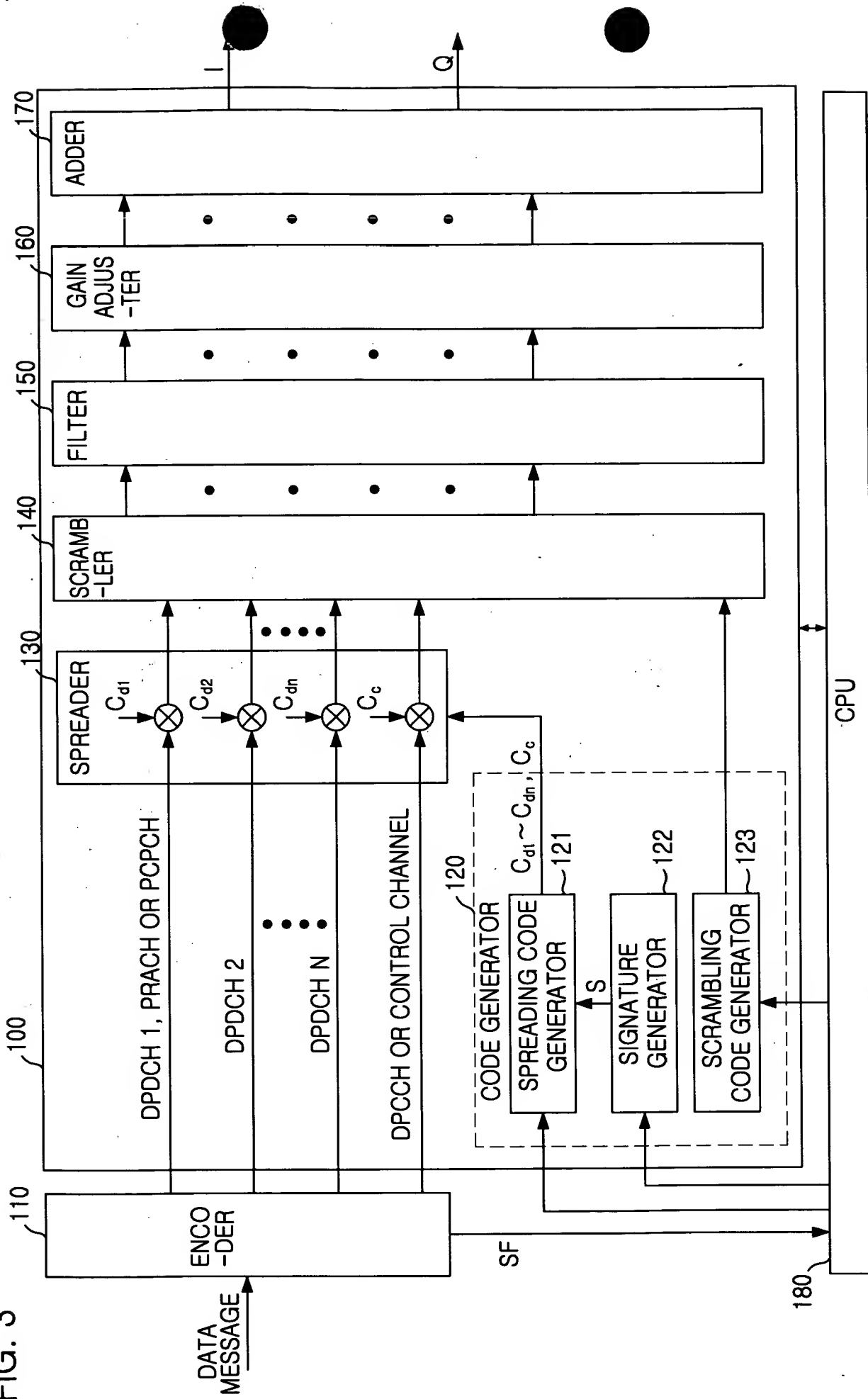


FIG. 3



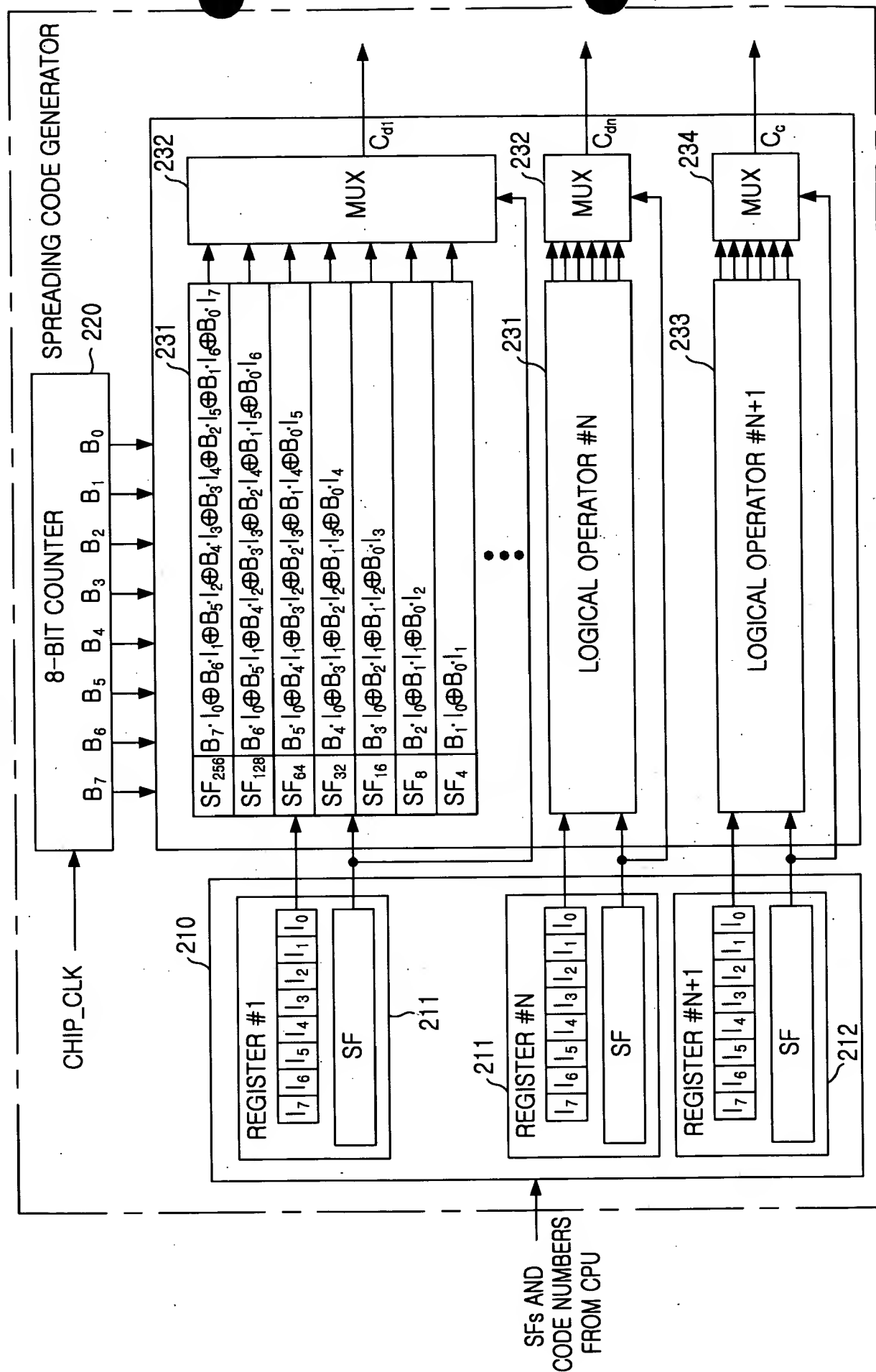
[illegible]

FIG. 5

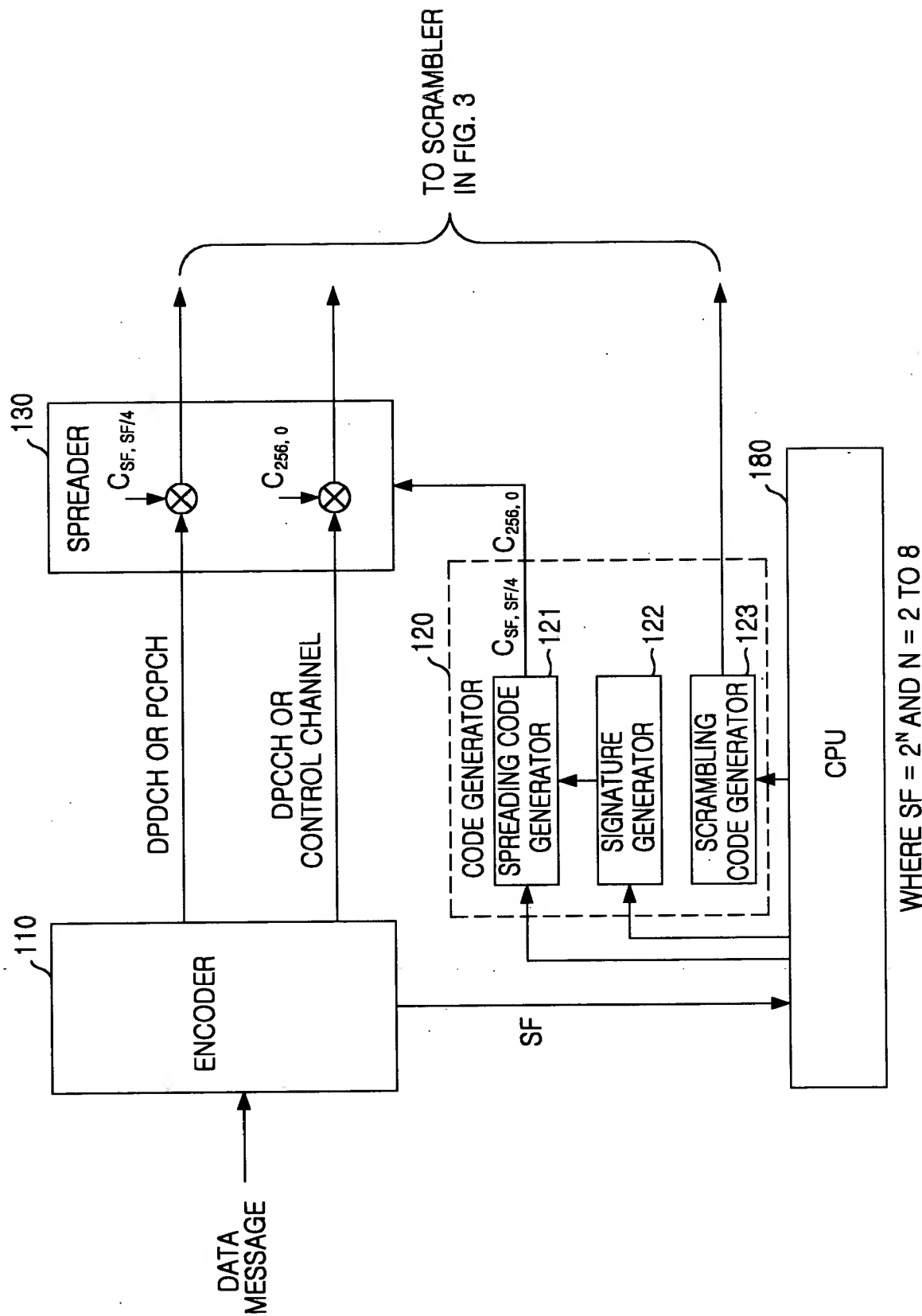
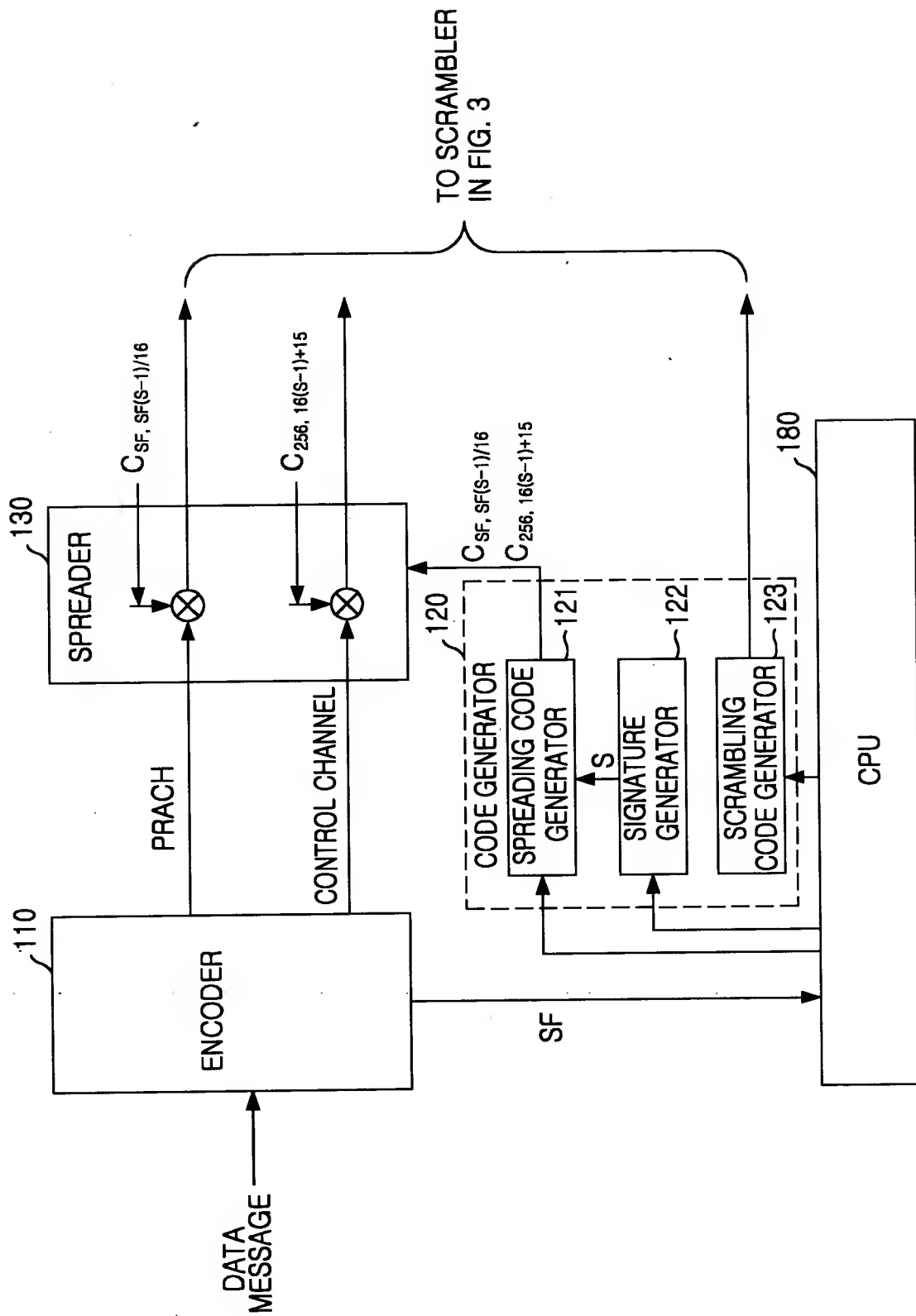


FIG. 6



WHERE  $SF = 2^N$ ,  $N = 5$  TO  $8$  AND  $S = 1$  TO  $16$

FIG. 7

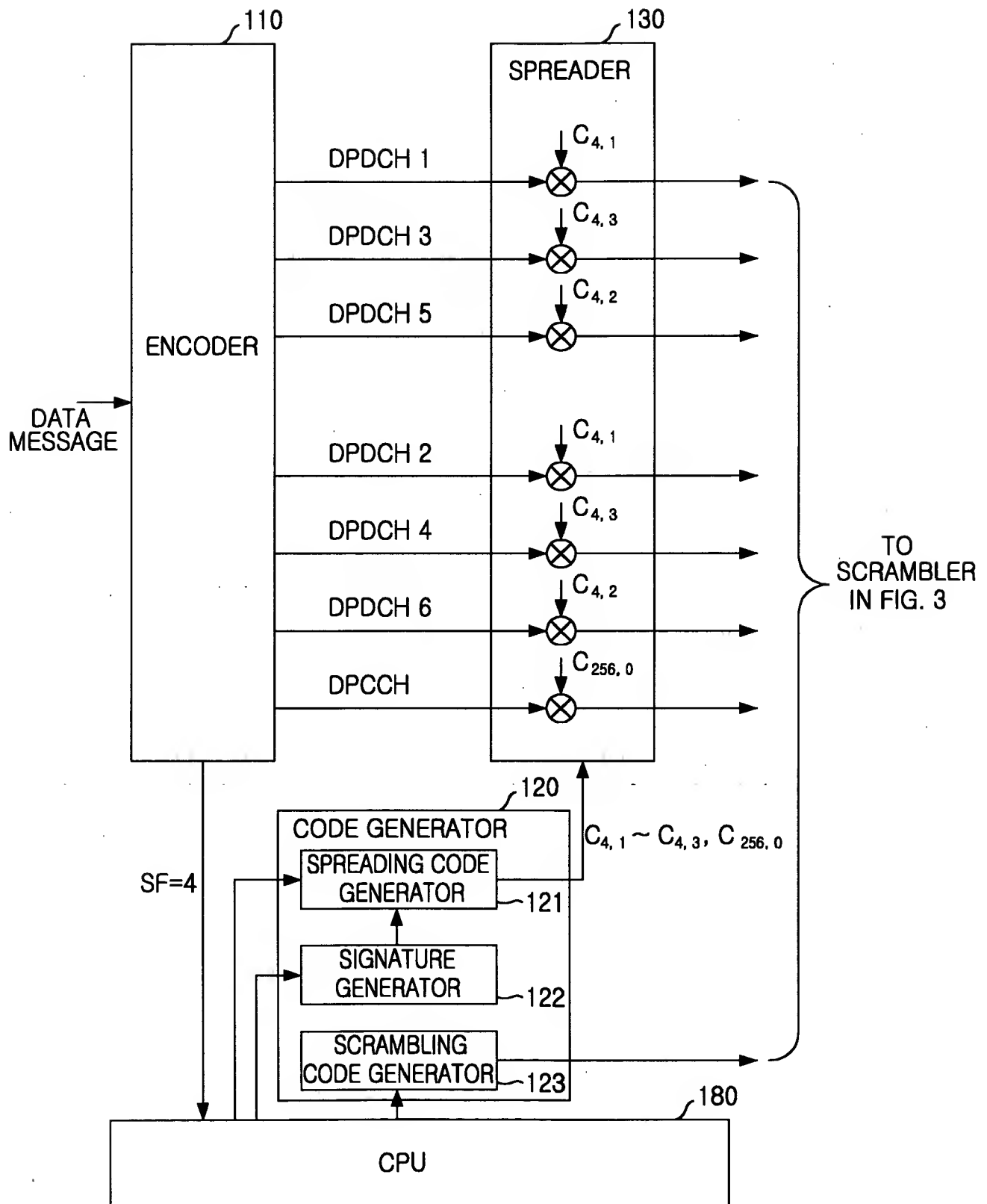


FIG. 8

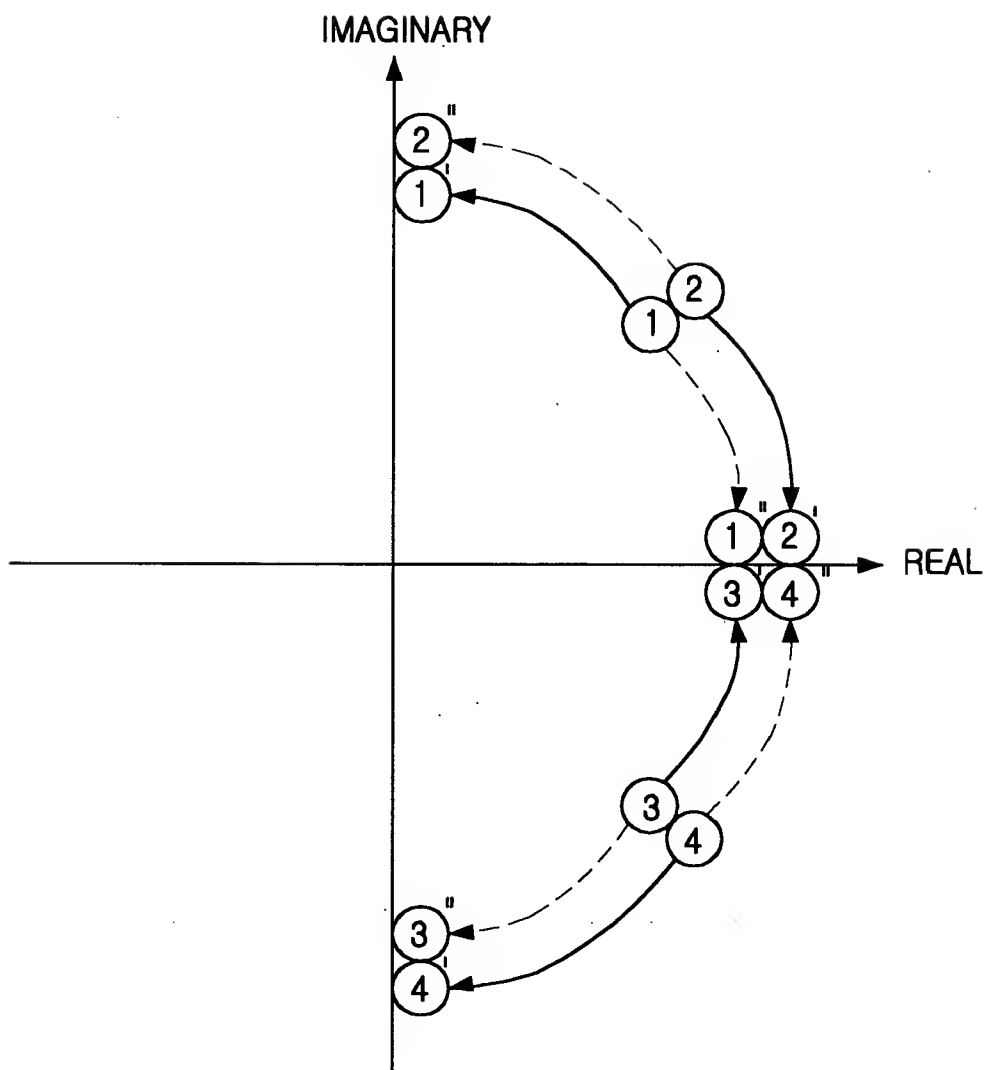




FIG. 9

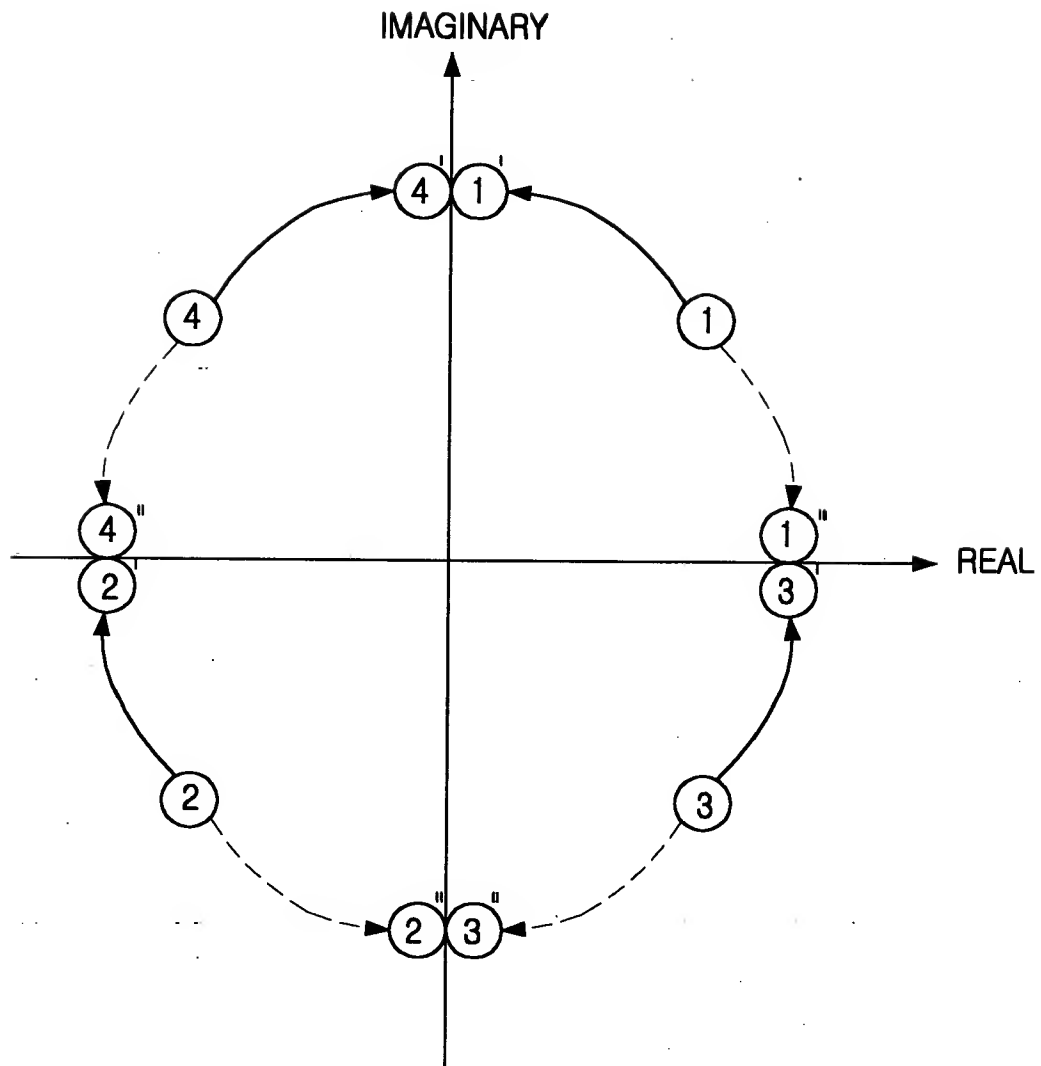


FIG. 10

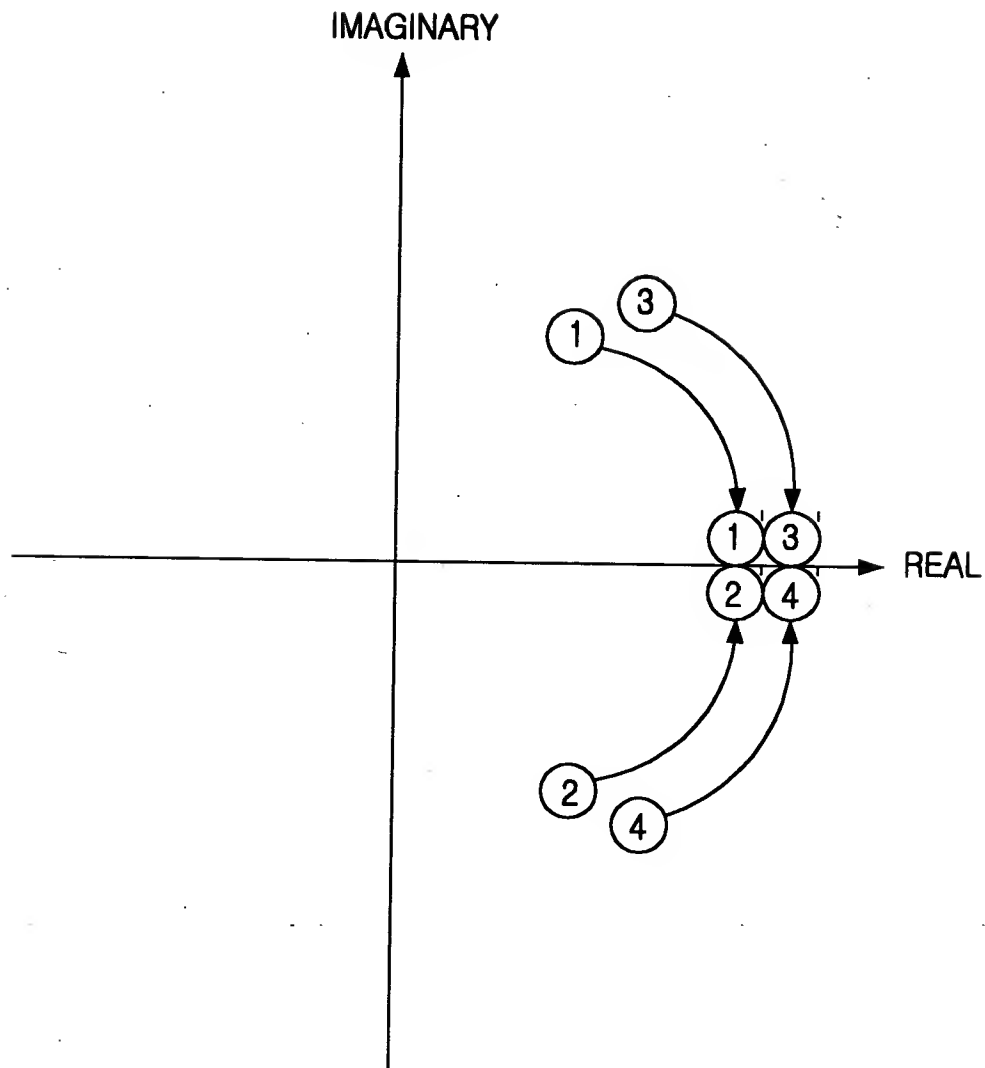


FIG. 11

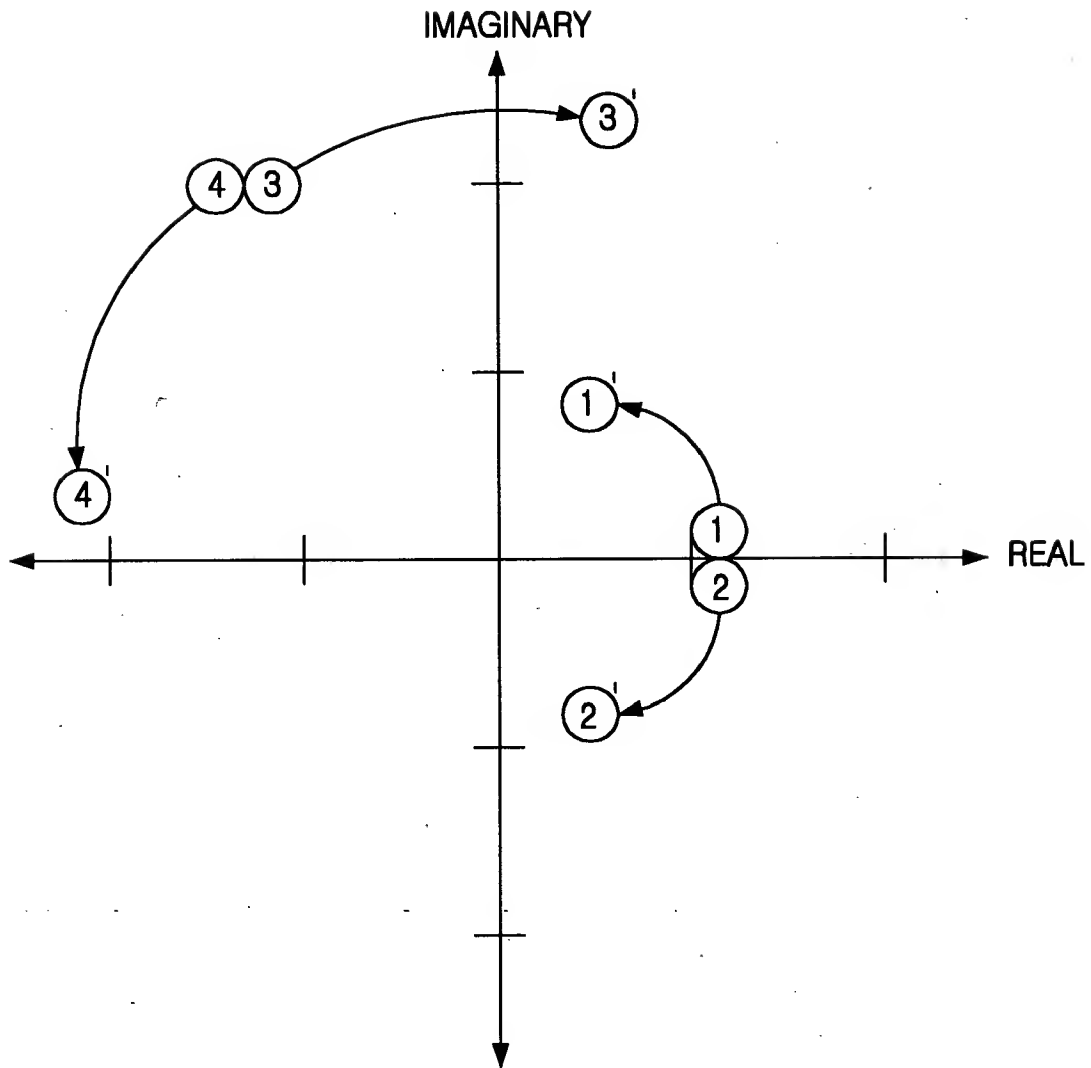


FIG. 12

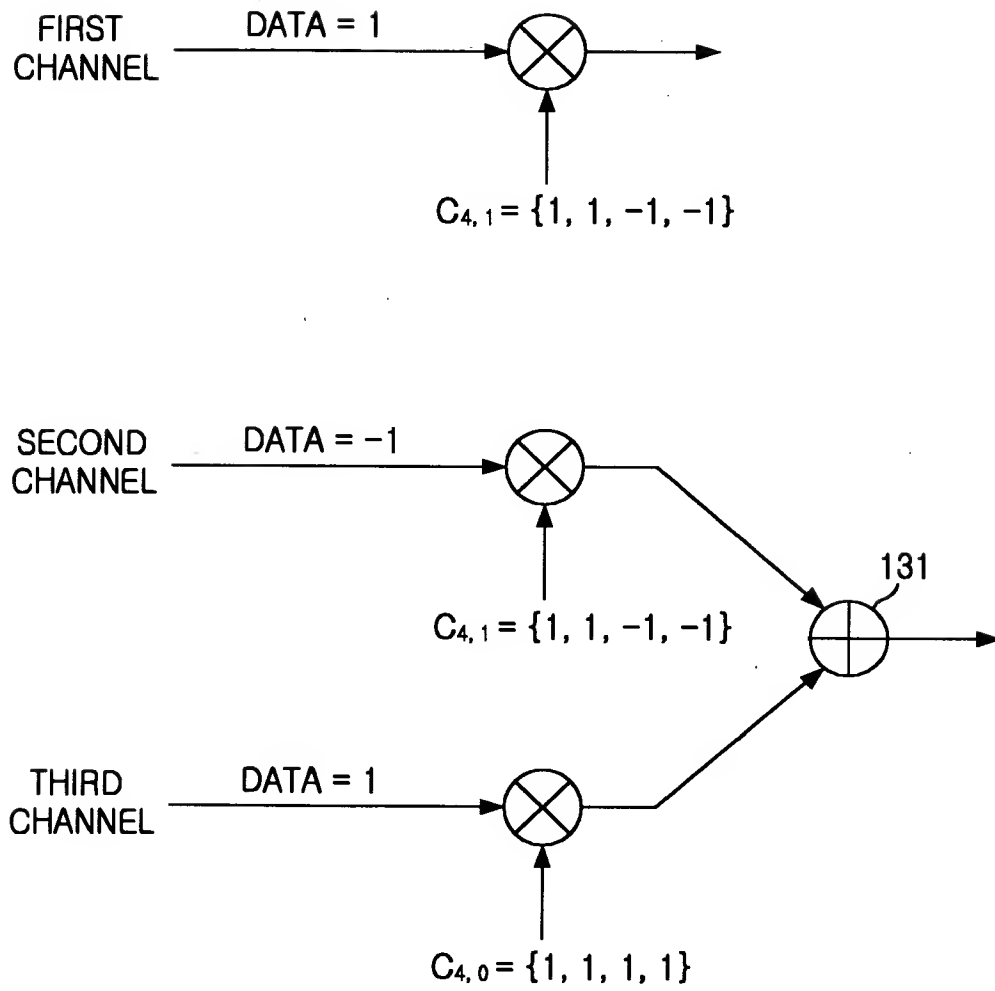


FIG. 13

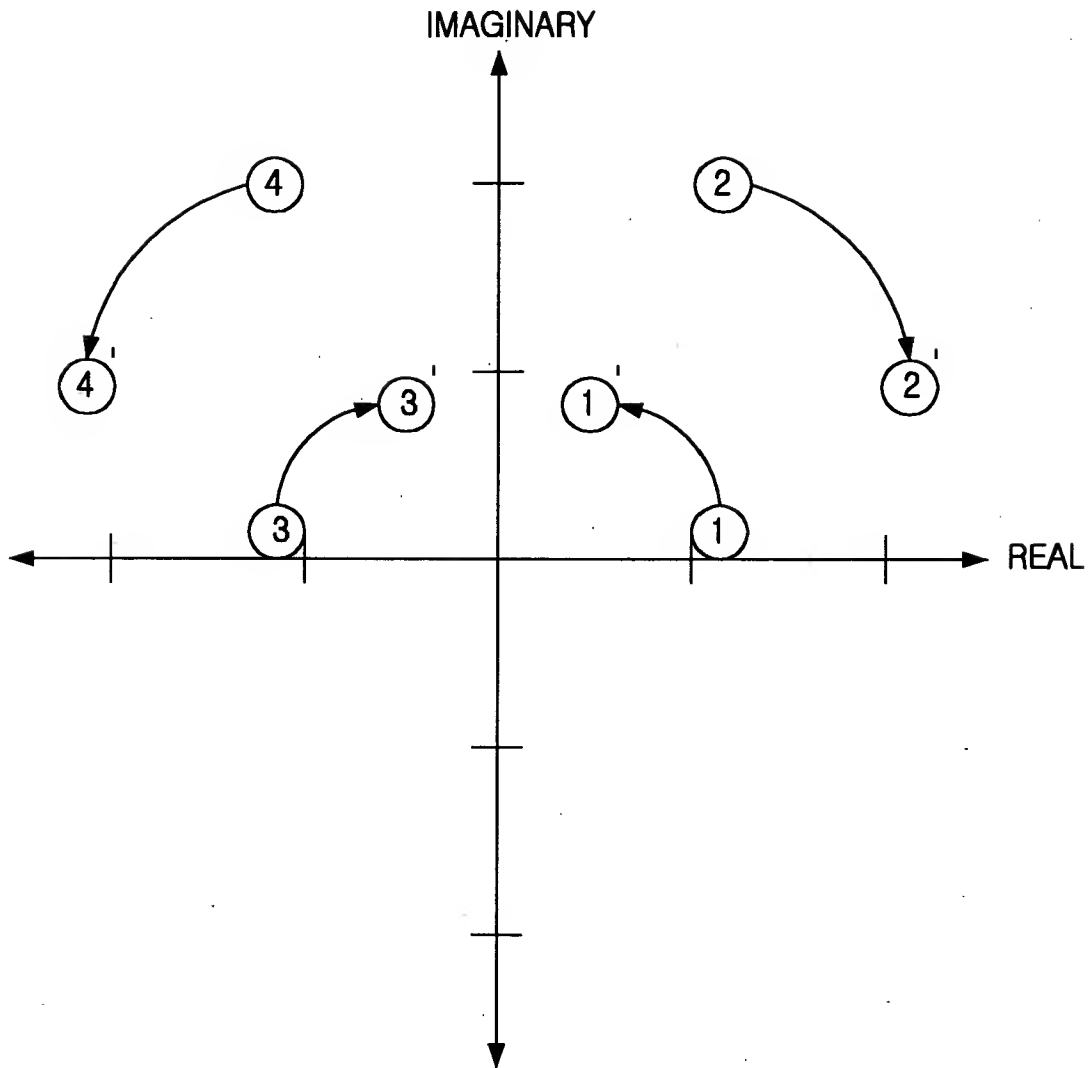


FIG. 14

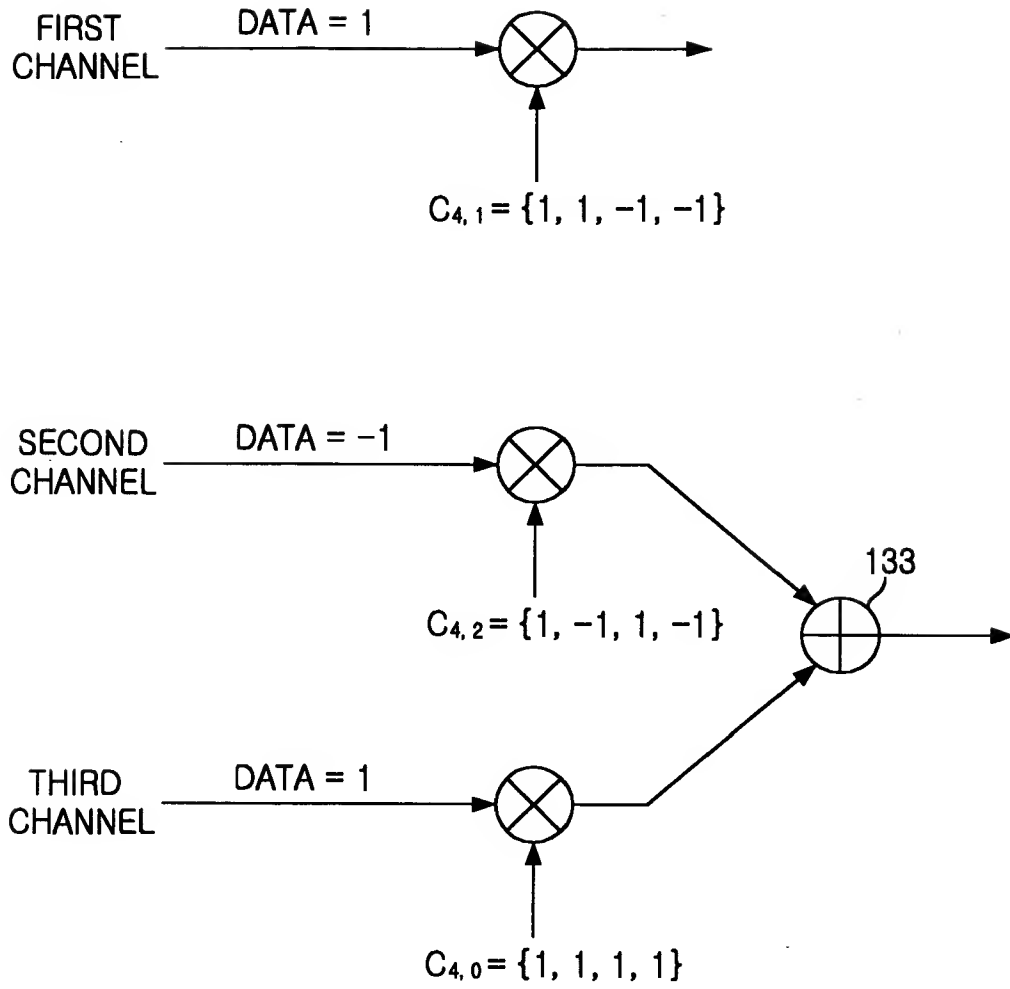


FIG. 15

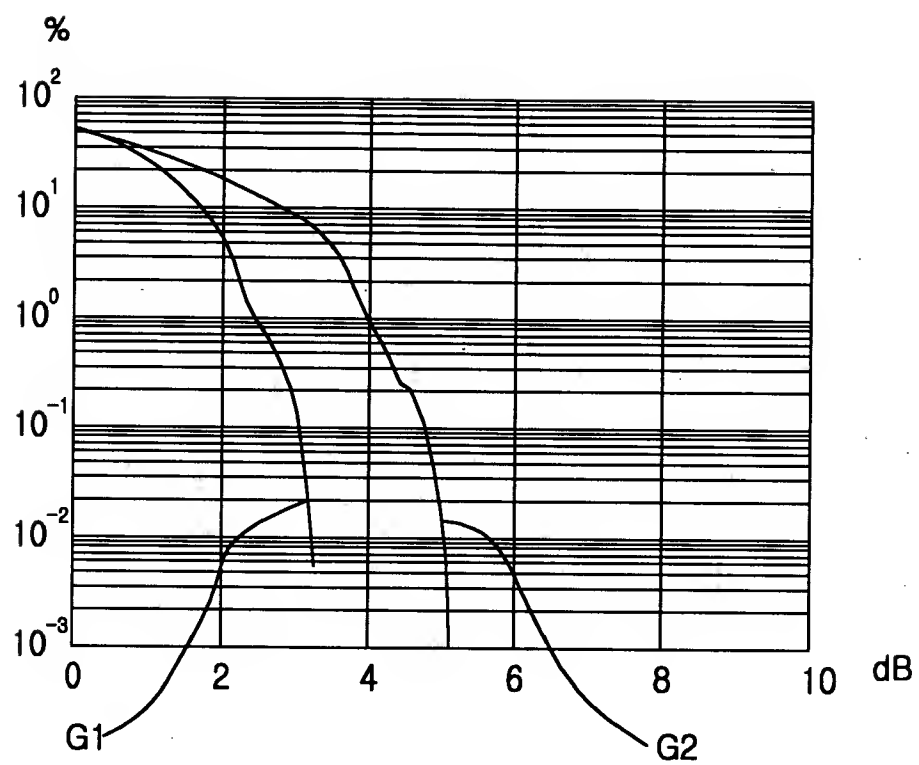


FIG. 16

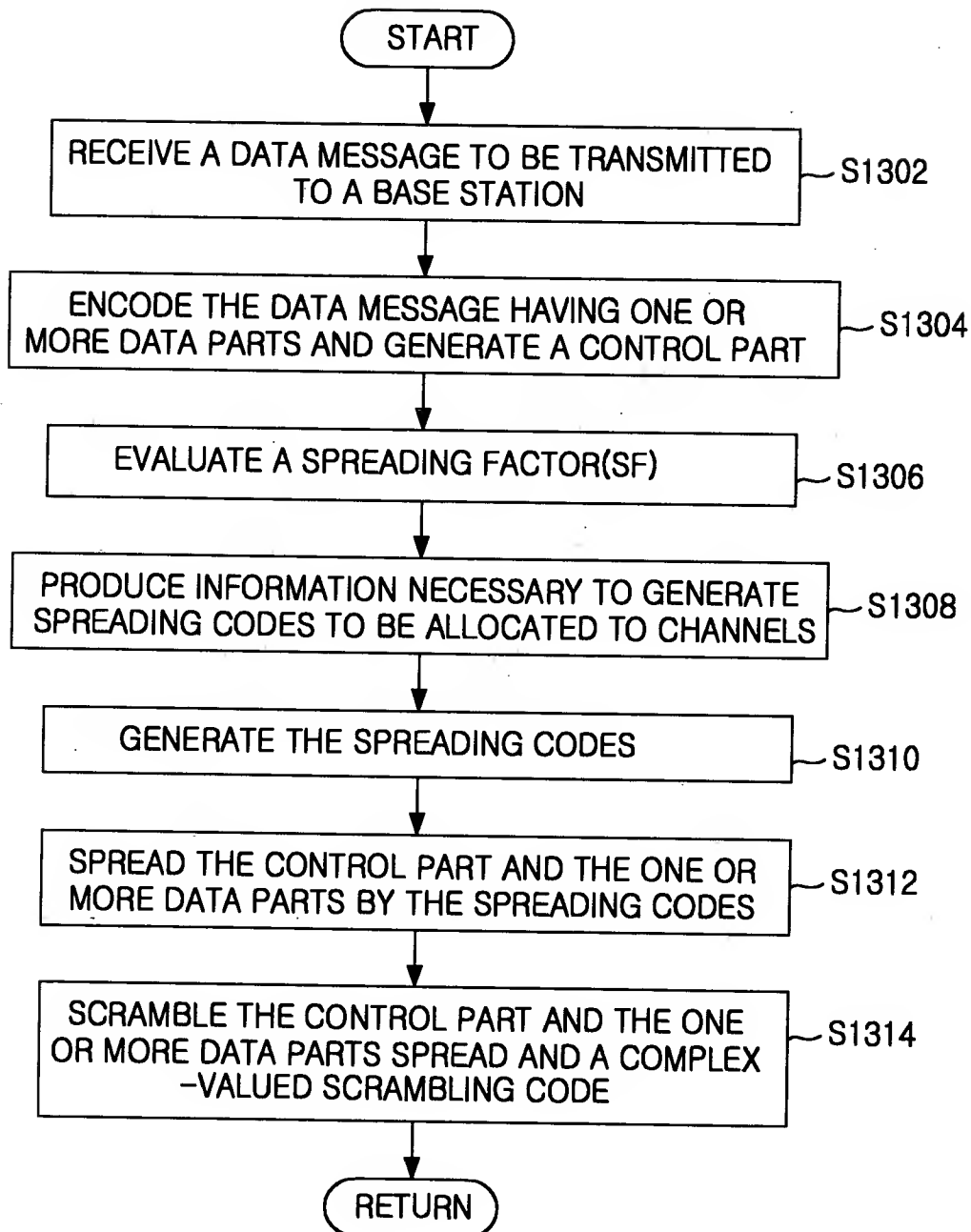




FIG. 17

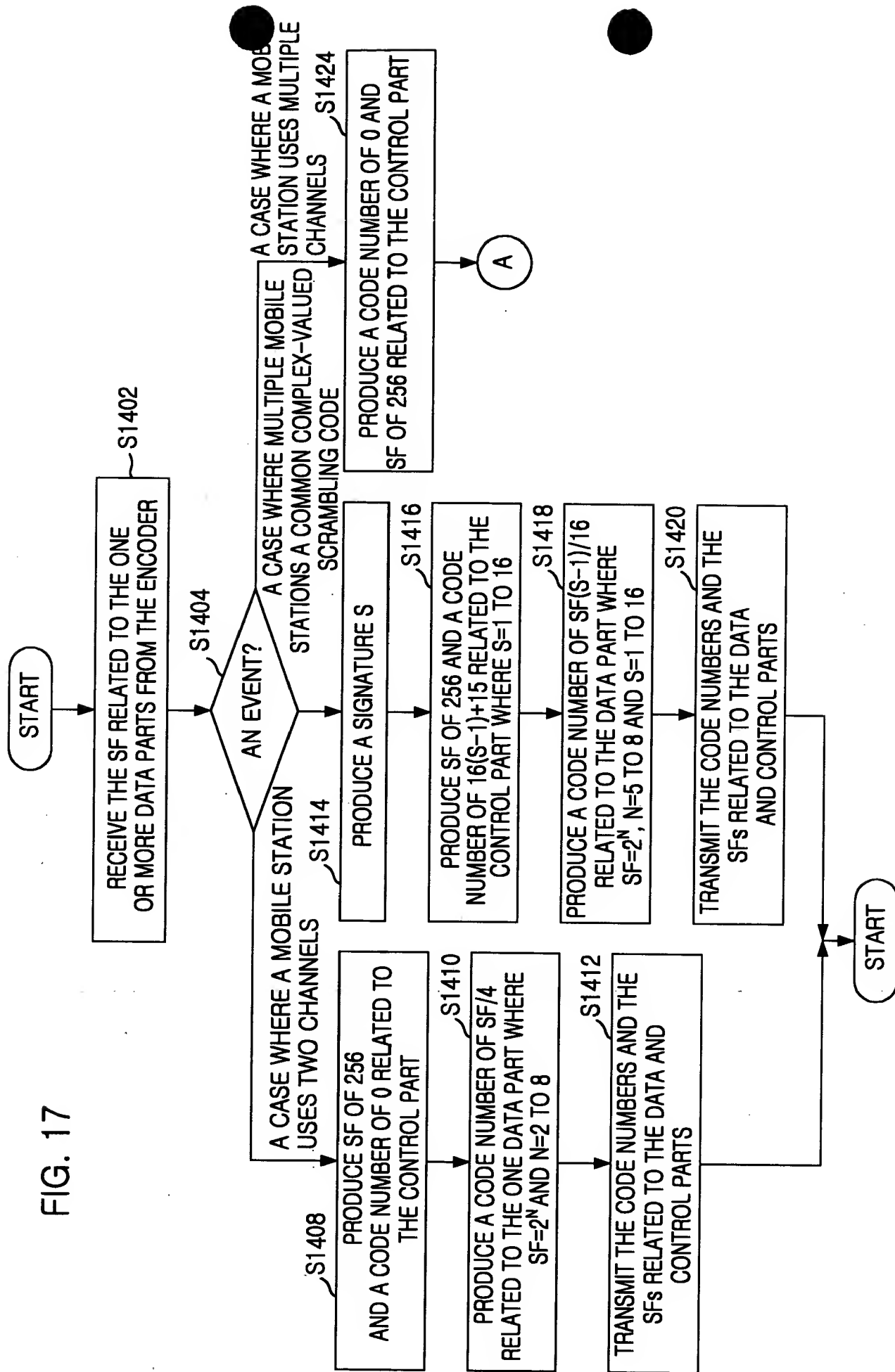


FIG. 18

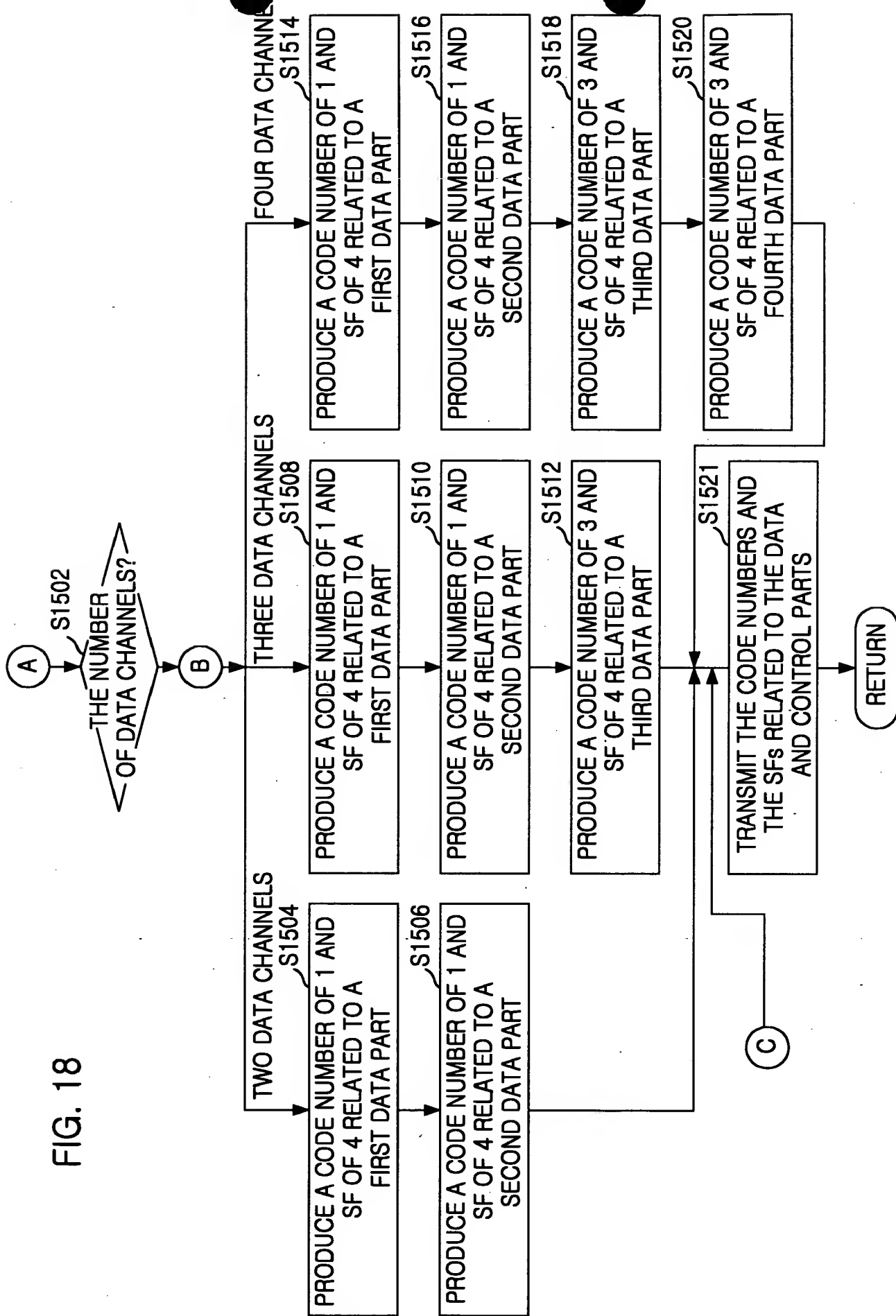


FIG. 19

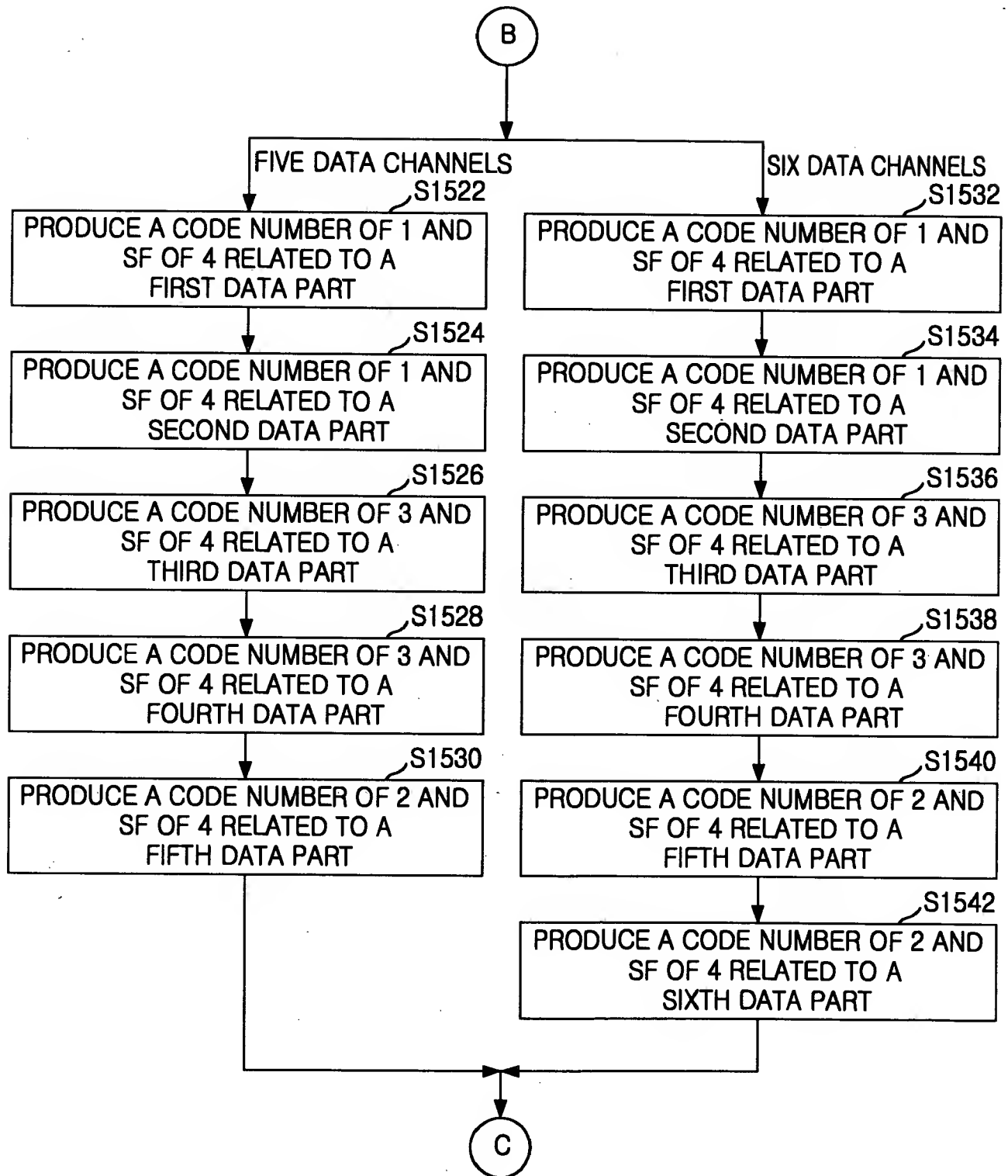


FIG. 20

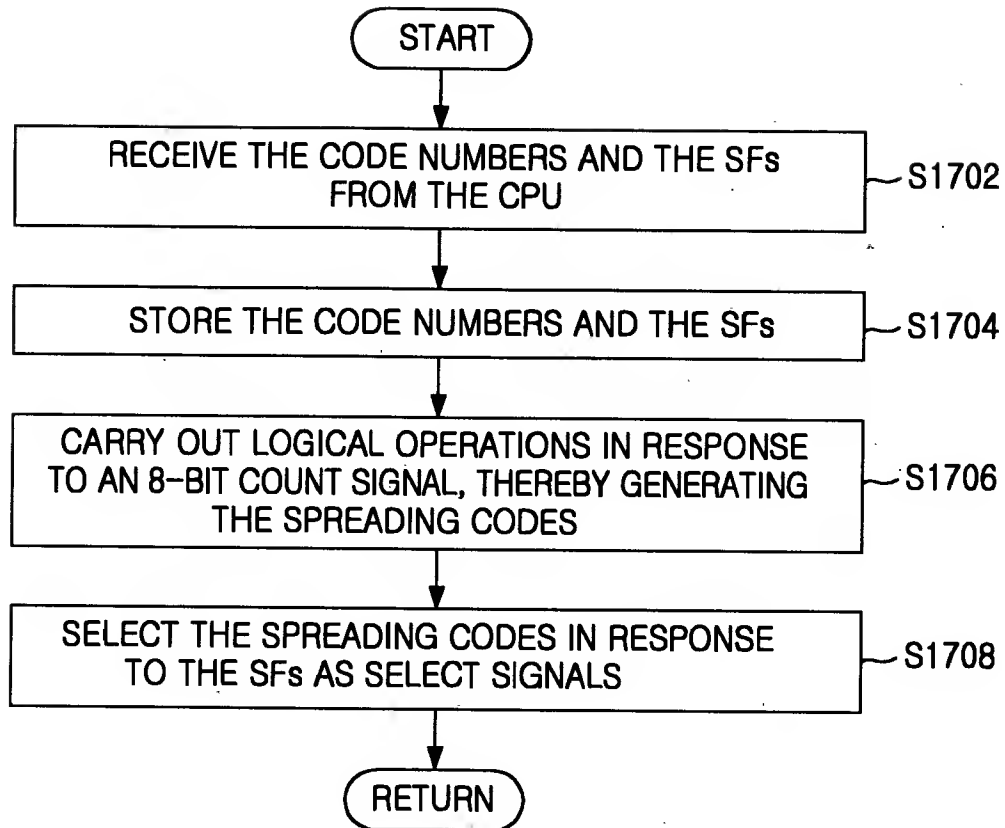


FIG. 21

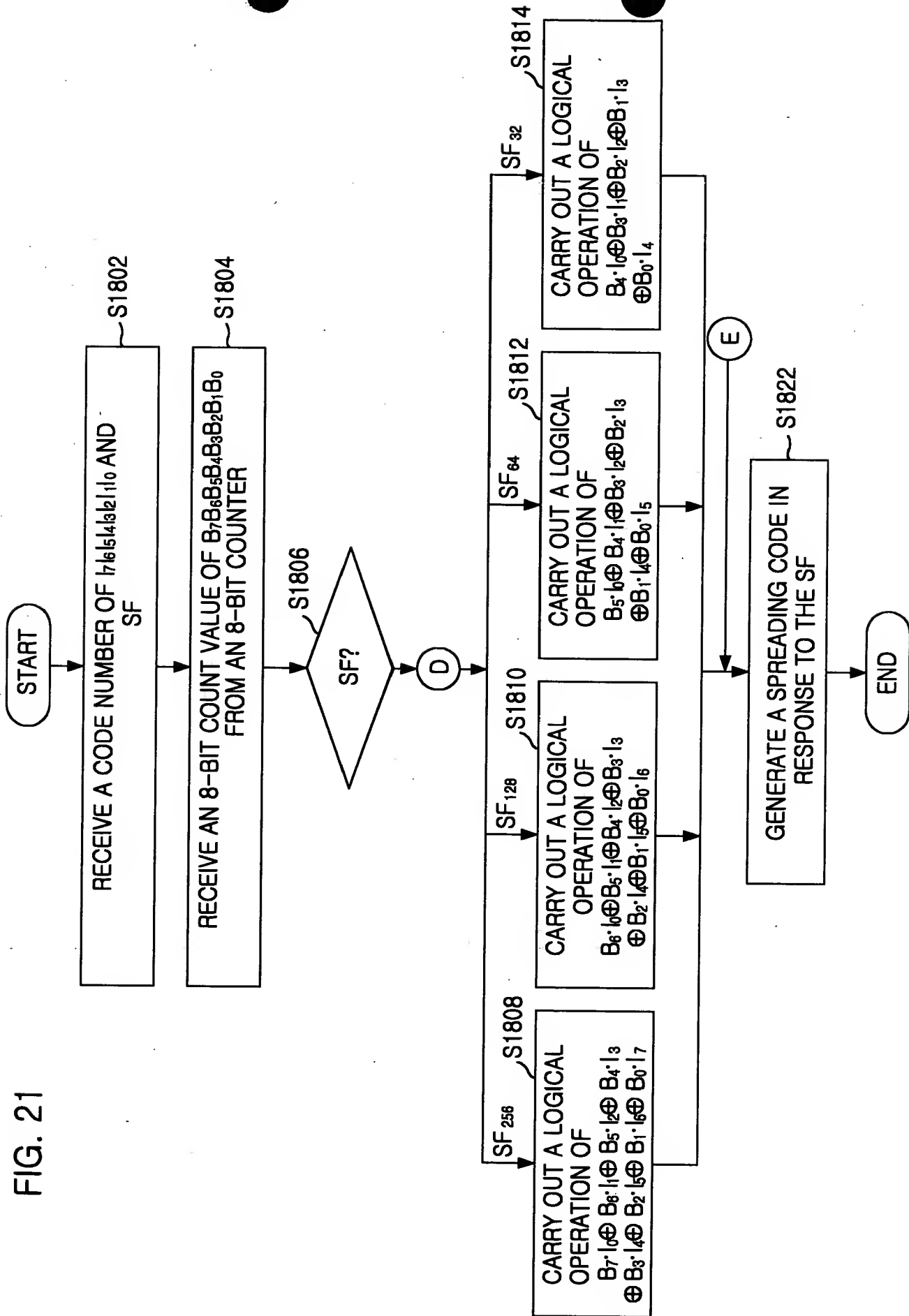


FIG. 22

